

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 11-352526  
 (43)Date of publication of application : 24.12.1999

(51)Int.Cl. G02F 1/19  
 G09F 9/37  
 H05B 33/00

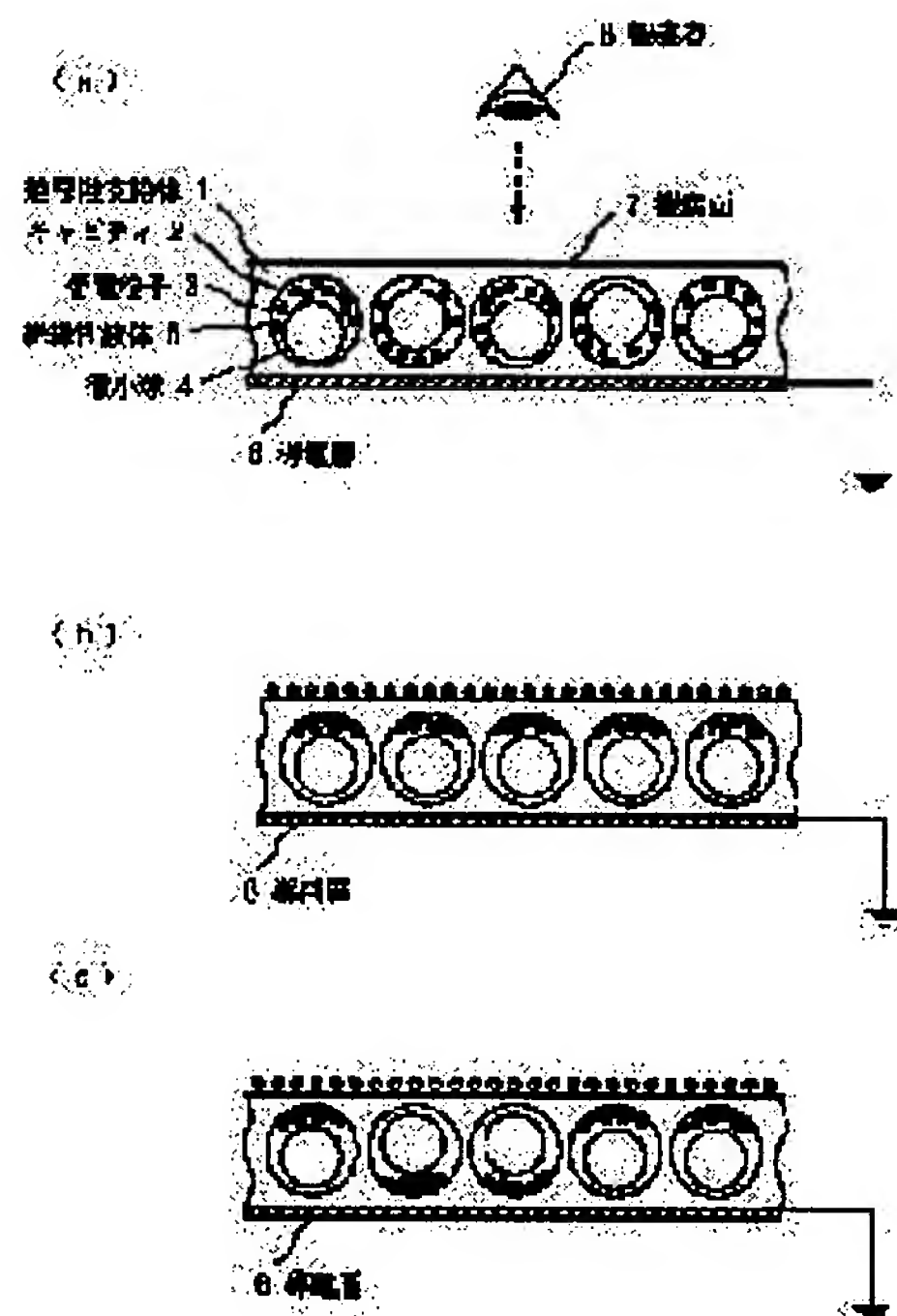
(21)Application number : 10-176576 (71)Applicant : CANON INC  
 (22)Date of filing : 10.06.1998 (72)Inventor : MATSUDA HIROSHI

## (54) DISPLAY MEDIUM AND DISPLAY METHOD

### (57)Abstract:

**PROBLEM TO BE SOLVED:** To improve the contrast without degrading the service life and stability by providing an insulative base with microspheres, having a color, plural charged particles which have a diameter smaller than the diameter of these microspheres and having a color different from the color thereof and an insulating liquid.

**SOLUTION:** An insulating base 1 includes plural cavities 2 holding the microspheres 4 having the color, plural charged particles 3 having the diameter smaller than the diameter of the microspheres and having the color different from the color thereof and the insulating liquid 5 for dispersing the charged particles 3. The charged particles 3 are black and are electrostatically charged negative. When the electrostatic latent image of a positive charge is formed on an observation surface 7, the charged particles 3 are moved and attracted to the side near an observer 8 through electrophoresis in the cavities 2 and mainly the black is observed. When the electrostatic latent image of a negative charge is next formed on the observation surface 7 according to desired patterns, the charged particles 3 of the region are moved and attracted to a conductive layer 6 side and mainly the color possessed by the microspheres 4 is observed from the observer 8. Then, a black and white display is made possible, if the microspheres 4 are white.



## LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than  
the examiner's decision of rejection or  
application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's  
decision of rejection]

[Date of requesting appeal against examiner's  
decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2000 Japan Patent Office